

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/32090

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C09D127/16 C09D127/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C09D C08L C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/55130 A (IWATO SATOKO ;KAKU MUREO (JP); TATSUHIRO TAKAHASI (JP); FEIRING AN) 21 September 2000 (2000-09-21) claims; example 19	1-7
X	US 2003/166807 A1 (BIENER WILHELM-FRANZ ET AL) 4 September 2003 (2003-09-04) table 2 page 3, paragraph 52	1-7
X	US 2003/170455 A1 (IWAKIRI RYUZI ET AL) 11 September 2003 (2003-09-11) claims; example 10	1-7
X	US 4 335 238 A (MOORE ALBERT L ET AL) 15 June 1982 (1982-06-15) example 2 column 6, lines 46-48	1-7
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

27 May 2004

Date of mailing of the international search report

09.06.04

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Baekelmans, D

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/32090

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 123 603 A (STEWART JR CLARE A) 31 October 1978 (1978-10-31) column 2, line 33; claims -----	1-7
X	US 2002/094440 A1 (ROLLER MARK B ET AL) 18 July 2002 (2002-07-18) examples 3-5 -----	8-12
X	EP 0 365 933 A (DAIKIN IND LTD) 2 May 1990 (1990-05-02) claim 1 -----	8-12
X	US 4 764 431 A (MANGANELLI DEL FA CARLO ET AL) 16 August 1988 (1988-08-16) example 1 -----	8-12
X	WO 01/37043 A (FRENCH ROGER HARQUAIL ; ZUMSTEG FREDRICK CLAUS JR (US); DU PONT (US);) 25 May 2001 (2001-05-25) claims 10-13 -----	8-12
X	US 3 023 187 A (SHEN LO ELIZABETH) 27 February 1962 (1962-02-27) column 8, line 73 - column 9, line 3; claims 1-3 -----	8-12
X	GB 1 395 609 A (TEIJIN LTD) 29 May 1975 (1975-05-29) comparative examples 2, 7 and 9 -----	8-12
X	FR 1 350 581 A (DU PONT) 24 January 1964 (1964-01-24) the whole document -----	8-12
X	GB 871 582 A (DU PONT) 28 June 1961 (1961-06-28) the whole document -----	8-12
X	US 3 194 796 A (NOONAN SQUIRE EDWARD) 13 July 1965 (1965-07-13) the whole document -----	8-12
X	US 3 235 537 A (ARTHUR GALLAGHER GEORGE ET AL) 15 February 1966 (1966-02-15) column 4, lines 71-75; example 12 -----	13-16
A	US 4 546 141 A (GEBAUER GERHARD) 8 October 1985 (1985-10-08) the whole document -----	13-16
A	DE 32 27 045 A (HOECHST AG) 26 January 1984 (1984-01-26) the whole document -----	13-16
	-/--	

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 03/32090

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 4 395 445 A (GEBAUER GERHARD ET AL) 26 July 1983 (1983-07-26) claims</p> <p>-----</p>	13-16

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: claims 1-7

A one layer coating system comprising a fluorinated copolymer having the formula VF₂/TFE/HFP wherein the molar ratio TFE/HFP is 0.1-1.9 and the VF₂ content is 47-60 mol%.

2. claims: claims 8-12

A one layer coating system consisting of a fluorinated copolymer having the formula VF₂/HFP wherein the VF₂ content is 40-80 mol%.

3. claims: claims 13-16

A one layer coating system comprising a fluorinated copolymer having the formula VF₂/TFE/PMVE wherein the VF₂ content is 18-60 mol% and the TFE/PMVE mole ratio is 0.1-1.9.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/32090

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0055130	A	21-09-2000	CA 2360903 A1 EP 1169399 A2 JP 2002539293 T WO 0055130 A2	21-09-2000 09-01-2002 19-11-2002 21-09-2000
US 2003166807	A1	04-09-2003	DE 19924439 A1 AU 5213200 A CA 2375331 A1 DE 50005532 D1 WO 0073360 A1 EP 1189954 A1 JP 2003501498 T	30-11-2000 18-12-2000 07-12-2000 08-04-2004 07-12-2000 27-03-2002 14-01-2003
US 2003170455	A1	11-09-2003	JP 9165535 A DE 69631790 D1 EP 0869157 A1 WO 9722671 A1 US 2001003127 A1	24-06-1997 08-04-2004 07-10-1998 26-06-1997 07-06-2001
US 4335238	A	15-06-1982	CA 1215493 A1 DE 3168061 D1 EP 0050437 A1 JP 57098514 A JP 61050487 B	16-12-1986 14-02-1985 28-04-1982 18-06-1982 05-11-1986
US 4123603	A	31-10-1978	AU 523479 B2 AU 3663078 A BE 867619 A1 CA 1103398 A1 DE 2823179 A1 DK 237478 A ,B, FR 2393012 A1 GB 1600940 A IE 46834 B1 IT 1096613 B JP 1401544 C JP 53149291 A JP 62001965 B LU 79728 A1 NL 7805923 A ,B, SE 439489 B SE 7804128 A SU 865129 A3	29-07-1982 06-12-1979 30-11-1978 16-06-1981 07-12-1978 01-12-1978 29-12-1978 21-10-1981 05-10-1983 26-08-1985 28-09-1987 26-12-1978 17-01-1987 02-02-1979 04-12-1978 17-06-1985 01-12-1978 15-09-1981
US 2002094440	A1	18-07-2002	AU 1129902 A AU 9316101 A CA 2425753 A1 CN 1477980 T EP 1335761 A1 WO 0226280 A1 AU 1132102 A AU 7730201 A AU 9486901 A CA 2357881 A1 CA 2424029 A1 CA 2424038 A1 CA 2424049 A1 EP 1192957 A2	08-04-2002 08-04-2002 04-04-2002 25-02-2004 20-08-2003 04-04-2002 08-04-2002 11-04-2002 08-04-2002 29-03-2002 04-04-2002 04-04-2002 04-04-2002 03-04-2002

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 03/32090

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002094440 A1		EP 1322235 A1	02-07-2003
		EP 1322351 A1	02-07-2003
		EP 1322342 A1	02-07-2003
		JP 2002238994 A	27-08-2002
		WO 0226139 A1	04-04-2002
		WO 0226281 A1	04-04-2002
		WO 0226271 A1	04-04-2002
		US 2002111590 A1	15-08-2002
		US 2002133183 A1	19-09-2002
		US 2002051730 A1	02-05-2002
EP 0365933 A	02-05-1990	JP 2115253 A	27-04-1990
		EP 0365933 A2	02-05-1990
US 4764431 A	16-08-1988	IT 1207493 B	25-05-1989
		AT 52243 T	15-05-1990
		DE 3670627 D1	31-05-1990
		EP 0192494 A1	27-08-1986
		GR 860488 A1	18-06-1986
WO 0137043 A	25-05-2001	CN 1391664 T	15-01-2003
		EP 1238309 A1	11-09-2002
		EP 1238310 A1	11-09-2002
		JP 2003514955 T	22-04-2003
		JP 2003514956 T	22-04-2003
		WO 0137043 A1	25-05-2001
		WO 0137044 A1	25-05-2001
US 3023187 A	27-02-1962	NONE	
GB 1395609 A	29-05-1975	JP 51034415 B	27-09-1976
		JP 55004123 B	29-01-1980
		JP 48030787 A	23-04-1973
		JP 52003432 B	27-01-1977
		CA 964786 A1	18-03-1975
		DE 2233025 A1	18-01-1973
		US 3966660 A	29-06-1976
		US 4183837 A	15-01-1980
FR 1350581 A	24-01-1964	US 3194796 A	13-07-1965
		DE 1494496 A1	13-02-1969
		GB 1001765 A	18-08-1965
GB 871582 A	28-06-1961	DE 1097405 B	
		FR 1209590 A	02-03-1960
US 3194796 A	13-07-1965	DE 1494496 A1	13-02-1969
		FR 1350581 A	24-01-1964
		GB 1001765 A	18-08-1965
US 3235537 A	15-02-1966	DE 1569309 A1	09-04-1970
		DE 1240669 B	18-05-1967
		FR 1330387 A	21-06-1963
		GB 953098 A	25-03-1964
US 4546141 A	08-10-1985	DE 3227043 A1	26-01-1984
		DE 3227044 A1	26-01-1984
		DE 3227045 A1	26-01-1984

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/32090

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4546141	A		BR 8303860 A	28-02-1984
			CA 1212189 A1	30-09-1986
			DE 3366454 D1	30-10-1986
			EP 0100889 A1	22-02-1984
			ES 8407325 A1	01-12-1984
<hr/>				
DE 3227045	A	26-01-1984	DE 3227045 A1	26-01-1984
			BR 8303860 A	28-02-1984
			CA 1212189 A1	30-09-1986
			DE 3366454 D1	30-10-1986
			EP 0100889 A1	22-02-1984
			ES 8407325 A1	01-12-1984
			US 4546141 A	08-10-1985
<hr/>				
US 4395445	A	26-07-1983	DE 2906787 A1	04-09-1980
			CA 1153485 A1	06-09-1983
			DD 149234 A5	01-07-1981
			DE 3060396 D1	01-07-1982
			EP 0014974 A2	03-09-1980
			PL 222155 A1	03-11-1980
<hr/>				